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SEQUENCE LISTING

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<120> AVIAN HEPATITIS E VIRUS, VACCINES AND METHODS OF PROTECTING
AGAINST AVIAN HEPATITIS-SPLENOMEGALY SYNDROME AND MAMMALIAN
HEPATITIS E

<130> AM100389

<140> 10/029840

<141> 2001-12-31

<160> 25

<170> PatentIn version 3.1

<210> 1

<211> 3946

<212> DNA

<213> Hepatitis E virus

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<211> 146
<212> PRT
<213> Hepatitis E virus

<400> 2

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Gly Leu Gln Pro Thr Ser Trp Arg Thr Val Ser His Arg Cys Pro Trp
20 25 30

Asp Val Cys Ile Phe Leu Arg Thr Asp Tyr Pro Thr Ile Thr Thr Thr

35	40	45
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50	55	60
Lys Ile Val Phe Thr Gln Val Ala Lys Gln Ser Asn Pro Gly Ser Ile		
65	70	75
Thr Val His Glu Ala Gln Gly Ser Thr Phe Asp Gln Thr Thr Ile Ile		
	85	90
Ala Thr Leu Asp Ala Arg Gly Leu Ile Ala Ser Ser Arg Ala His Ala		
	100	105
Ile Val Ala Leu Thr Arg His Arg Glu Arg Cys Ser Val Ile Asp Val		
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Gly Gly Val Leu Val Glu Ile Gly Val Thr Asp Ala Met Phe Asn Asn		
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Ile Glu		
145		

<210> 3
 <211> 439
 <212> DNA
 <213> Hepatitis E virus

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<210> 4
 <211> 483
 <212> PRT
 <213> Hepatitis E virus

<400> 4

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Asp Asp Thr Val Asp Gly Leu Leu Asp Ile Pro Pro Ala His Thr Asp
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Val Ala Ala Val Leu Thr Ala Glu Ala Ile Gly His Ala Pro Leu Glu
35 40 45

Leu Ala Ala Ile Asn Pro Pro Gly Pro Val Leu Glu Gln Gly Leu Leu
50 55 60

Tyr Met Pro Ala Arg Leu Asp Gly Arg Asp Glu Val Val Lys Leu Gln
65 70 75 80

Leu Ser Asp Thr Val His Cys Arg Leu Ala Ala Pro Thr Ser Arg Leu
85 90 95

Ala Val Ile Asn Thr Leu Val Gly Arg Tyr Gly Lys Ala Thr Lys Leu
100 105 110

Pro Glu Val Glu Tyr Asp Leu Met Asp Thr Ile Ala Gln Phe Trp His
115 120 125

His Ile Gly Pro Ile Asn Pro Ser Thr Leu Glu Tyr Ala Glu Met Cys
130 135 140

Glu Ala Met Leu Ser Lys Gly Gln Asp Gly Ser Leu Ile Val His Leu
145 150 155 160

Asp Leu Gln Asp Ala Asp Cys Ser Arg Ile Thr Phe Phe Gln Lys Asp
165 170 175

Cys Ala Lys Phe Thr Leu Asp Asp Pro Val Ala His Gly Lys Val Gly
180 185 190

Gln Gly Ile Ser Ala Trp Pro Lys Thr Leu Cys Ala Leu Phe Gly Pro
195 200 205

Trp Phe Arg Ala Ile Glu Lys His Leu Val Ala Gly Leu Pro Pro Gly
210 215 220

Tyr Tyr Tyr Gly Asp Leu Tyr Thr Glu Ala Asp Leu His Arg Ser Val
 225 230 235 240
 Leu Cys Ala Pro Ala Gly His Leu Val Phe Glu Asn Asp Phe Ser Glu
 245 250 255
 Phe Asp Ser Thr Gln Asn Asn Val Ser Leu Asp Leu Glu Cys Glu Leu
 260 265 270
 Met Arg Arg Phe Gly Met Pro Asp Trp Met Val Ala Leu Tyr His Leu
 275 280 285
 Val Arg Ser Tyr Trp Leu Leu Val Ala Pro Lys Glu Ala Leu Arg Gly
 290 295 300
 Cys Trp Lys Lys His Ser Gly Glu Pro Gly Thr Leu Leu Trp Asn Thr
 305 310 315 320
 Val Trp Asn Met Thr Val Leu His His Val Tyr Glu Phe Asp Arg Pro
 325 330 335
 Ser Val Leu Cys Phe Lys Gly Asp Asp Ser Val Val Val Cys Glu Ser
 340 345 350
 Val Arg Ala Arg Pro Glu Gly Val Ser Leu Val Ala Asp Cys Gly Leu
 355 360 365
 Lys Met Lys Asp Lys Thr Gly Pro Cys Gly Ala Phe Ser Asn Leu Leu
 370 375 380
 Ile Phe Pro Gly Ala Gly Val Val Cys Asp Leu Leu Arg Gln Trp Gly
 385 390 395 400
 Arg Leu Thr Asp Lys Asn Trp Gly Pro Asp Ile Gln Arg Met Gln Asp
 405 410 415
 Leu Glu Gln Ala Cys Lys Asp Phe Val Ala Arg Val Val Thr Gln Gly
 420 425 430
 Lys Glu Met Leu Thr Ile Gln Leu Val Ala Gly Tyr Tyr Gly Val Glu
 435 440 445
 Val Gly Met Val Glu Val Val Trp Gly Ala Leu Lys Ala Cys Ala Ala

450

455

460

Ala Arg Glu Thr Leu Val Thr Asn Arg Leu Pro Val Leu Asn Leu Ser
 465 470 475 480

Lys Glu Asp

<210> 5
 <211> 1450
 <212> DNA
 <213> Hepatitis E virus

<400> 5
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<210> 6
<211> 606
<212> PRT
<213> Hepatitis E virus

<400> 6

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20 25 30

Arg Arg Asp Asn Ser Ala Gln Trp Ser Thr Gln Gln Arg Pro Glu Gly
35 40 45

Ala Val Gly Pro Ala Pro Leu Thr Asp Val Val Thr Ala Ala Gly Thr
50 55 60

Arg Thr Val Pro Asp Val Asp Gln Ala Gly Ala Val Leu Val Arg Gln
65 70 75 80

Tyr Asn Leu Val Thr Ser Pro Leu Gly Leu Ala Thr Leu Gly Ser Thr
85 90 95

Asn Ala Leu Leu Tyr Ala Ala Pro Val Ser Pro Leu Met Pro Leu Gln
100 105 110

Asp Gly Thr Thr Ser Asn Ile Met Ser Thr Glu Ser Ser Asn Tyr Ala
115 120 125

Gln Tyr Arg Val Gln Gly Leu Thr Val Arg Trp Arg Pro Val Val Pro
130 135 140

Asn Ala Val Gly Gly Phe Ser Ile Ser Met Ala Tyr Trp Pro Gln Thr
145 150 155 160

Thr Ser Thr Pro Thr Ser Ile Asp Met Asn Ser Ile Thr Ser Thr Asp

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Val	Arg	Val	Val	Leu	Gln	Pro	Gly	Ser	Ala	Gly	Leu	Leu	Thr	Ile	Pro
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His	Glu	Arg	Leu	Ala	Tyr	Lys	Asn	Asn	Gly	Trp	Arg	Ser	Val	Glu	Thr
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Val	Ser	Val	Pro	Gln	Glu	Asp	Ala	Thr	Ser	Gly	Met	Leu	Met	Val	Cys
	210					215					220				
Val	His	Gly	Thr	Pro	Trp	Asn	Ser	Tyr	Thr	Asn	Ser	Val	Tyr	Thr	Gly
225					230					235					240
Pro	Leu	Gly	Met	Val	Asp	Phe	Ala	Ile	Lys	Leu	Gln	Leu	Arg	Asn	Leu
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Ser	Pro	Gly	Asn	Thr	Asn	Ala	Arg	Val	Thr	Arg	Val	Lys	Val	Thr	Ala
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Pro	His	Thr	Ile	Lys	Ala	Asp	Pro	Ser	Gly	Ala	Thr	Ile	Thr	Thr	Ala
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Pro Ala Pro Lys Arg Ala Leu Gly Thr Leu Arg Ser Gly Asp Val Leu
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 Arg Ile Thr Gly Ser Met Gln Tyr Val Thr Asn Ala Glu Leu Leu Pro
 420 425 430
 Gln Ser Val Ser Gln Gly Tyr Phe Gly Ala Gly Ser Thr Met Met Val
 435 440 445
 His Asn Leu Ile Thr Gly Val Arg Ala Pro Ala Ser Ser Val Asp Trp
 450 455 460
 Thr Lys Ala Thr Val Asp Gly Val Gln Val Lys Thr Val Asp Ala Ser
 465 470 475 480
 Ser Gly Ser Asn Arg Phe Ala Ala Leu Pro Ala Phe Gly Lys Pro Ala
 485 490 495
 Val Trp Gly Pro Gln Gly Ala Gly Tyr Phe Tyr Gln Tyr Asn Ser Thr
 500 505 510
 His Gln Glu Trp Ile Tyr Phe Leu Gln Asn Gly Ser Ser Val Val Trp
 515 520 525
 Tyr Ala Tyr Thr Asn Met Leu Gly Gln Lys Ser Asp Thr Ser Ile Leu
 530 535 540
 Phe Glu Val Arg Pro Ile Gln Ala Ser Asp Gln Pro Trp Phe Leu Ala
 545 550 555 560
 His His Thr Gly Gly Asp Asp Cys Thr Thr Cys Leu Pro Leu Gly Leu
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 580 585 590
 Arg Leu Leu Asp Arg Leu Ser Arg Thr Phe Pro Ser Pro Pro
 595 600 605

<210> 7
 <211> 1821
 <212> DNA
 <213> Hepatitis E virus

<400> 7

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<210> 8
<211> 87
<212> PRT
<213> Hepatitis E virus

<400> 8

Met Cys Leu Ser Cys Gln Phe Trp Cys Leu Glu Cys Gln Glu Ser Gly
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Val Gly Cys Arg Cys Val Asp Cys Cys Ser Cys Leu Gln Cys Ala Ala
20 25 30

Gly Cys Gln Gly Ala Pro Lys Arg Ser Gln Pro Glu Ala Gly Val Ala
35 40 45

Ser Ala Ala Val Thr Ile Gln Pro Ser Gly Ala Leu Asn Asn Ala Pro
50 55 60

Arg Glu Pro Ser Ala Pro Pro Leu Ser Gln Thr Leu Ser Pro Arg Gln
65 70 75 80

Val Leu Ala Arg Tyr Gln Met
85

<210> 9
<211> 264
<212> DNA
<213> Hepatitis E virus

<400> 9
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tcccagccgg aggcaggcgt ggccagcgcc gccgtgacaa ttcagcccag tggagcactc 180
aacaacgccc cgagggagcc gtcggccccc cccctctcac agacgttgtc accgcggcag 240
gtactcgcac ggtaccagat gtag 264

<210> 10
<211> 30
<212> DNA
<213> Hepatitis E virus

<400> 10
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 ggaagtgtgt atggttgagg tggtttgggg ggctttgaag gcctgcgccg cagcccgcga 180
 gaccctagtg accaacaggt tgccggtact aaacttatct aaggaggact gaacaaataa 240
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 ccaggaaagt ggggtgggat gtcgctgtgt agattgttgc tcatgcttgc aatgtgctgc 360
 ggggtgtcaa ggggctccca aacgctccca gccggaggca ggcgtggcca gcgccgccgt 420
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cccttgacac cccgcagcac att	23
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 <400> 22
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